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ORIGINAL DEPARTMENT.

COMMUNICATIONS.

Water: its History, Characteristics, Hygienic, and Therapeutic Uses.

By Samuel W. Francis, A.M., M.D.,
Of New York.

(*Continued from page* 80.)

MINERAL WATERS.

The curative properties of water are so universally comprehended and appreciated, that, for present purposes, the mere enumeration of some of the most effectual springs will serve to indicate their great value and lasting benefit. This protoxide of hydrogen, found in every clime; the supporter of nature's plans, the best wine for healthful livers, is of different density in various considerations; its purity greatly depending upon its locality. The most condensed opinion of these many qualities, to be found in water, is unfolded to the public by a lucid thinker, rational expounder and concise reporter.*

"Aqua levissima pluvialis est; denide fontana; tum ex flumine; tum ex puteo; past hæc ex nive, aut glacie; gravior his ex lacu; gravissima ex palude." How rarely do the modern learned seek to gain the essence of experience, and extract from multitudes of facts the pithy truth, whereby to propogate a principle and expose a fallacy. Shrewed minds think short. Keen intellects exhaust a subject, lop off the vast superfluous, and arrange with beautiful simplicity the outlines of a subtle aphorism!

To mention alone the countless number of mineral waters; vast tonic properties of the chalybeate springs; beneficial effects of the efficient theopegæ; fashionably, fascinating, cooling spas; acidulated drinks that rarely fail, and as many more equally important as constitutional remedies, successful in their results, and permanent in their consequences: to record the different methods of administering, by means of water, iron, potash, sulphur, bromine, alumina, phosphoric acid, fluate of lime, oxide of manganese, and, in fact, nearly all the gems of nature's soul, together with the opinions of the well-versed and the certificates of the cured, would fill many a quarto volume, and leave little space for sage reflections as to ways and means, cause and effect, loss and gain, in reference to hygienic laws and hospital statistics.

Many obstinate cases of rheumatism, that have defied treatment and outlasted good advice, have not unfrequently succumbed to baths and the judicious imbibition of medicated springs. And even after too free an indulgence in the good things of this world, the gourmand soothed himself in days now silent:

"Cum stomachus, domini fervet potuque ciboque
Frigidior Geticis petitur decocta pruinis."†

The pleasant tales of St. Winefred's Well and Holywell, the wise suggestions of the observing Dr. Barnard, and the strong belief of Cælius Aurelianus in this grand purifier of the person, cannot be perused without the pleasantest emotions and a glow of satisfaction at the earnestness of those who lived in antiquated times and under superstitious doctrines. The Willowbridge waters, the κλαχυσις of Hippocrates and the much-praised influence of St. Mingo's Well indicate the variety of interest, the extended fondness for a cleansing agent. Readily may the devotion of the Mahometans, in anointing their heads three several times with water, be appreciated as a symbol of purity. According to one authority,† previous to

* Celsus.

† Juvenal, Satyr. 5.
† Persius.

all devotional exercises, immersion, or ablution was practiced in the ages now gone by:

"Hanc sancte ut poscas Tyburino in gurgite Mergis
Mane caput bis terque et noctem flumine purgas,"

It were tedious in the extreme to go minutely into the early practices of the ancients. The most elaborately cultivated minds recommend a judicious use of water, medicated or otherwise, as the case may demand or the treatment indicate.

"Water drinkers are, in general, longer livers, are less subject to the decay of the faculties, have better teeth and more regular appetites than those who indulge in a more stimulating diluent for their common drinks."*

Another writer† whose knowledge of the animal economy was based on sound deductions, has observed that: "Pure water is the fluid designed by nature for the nourishment of all bodies, whether animal or vegetable."

Again, the following sentence from the mind of a mountain‡ of sound philosophy is of a character that embraces the entire field of potations: "All drinks which supply the necessary liquid, (that is for the support of the functions of the animal economy,) do it only by the quantity of elementary WATER they severally contain." Though these few extracts would seem abundant evidences of the priceless value of the crystal stream, I cite the thoughts of a deep cogitator:

"O madness! to think use of strongest wines
And strongest drink, our chief support of health,
When God, with these *forbidden*, made choice to rear
His mighty champion, strong above compare,
Whose drink was only from the limpid brook."

Nature is not faulty in her attendance upon the sick and debilitated who waste away for want of nourishment, and lapse into a feeble listlessness, the sad result of a deficient principle. Even as the instinct of the cautious quadruped prompts him to seek some relief in the soothing herbage of the sunny fields, so man, by following the indications of necessity, and drinking freely of what may be found in springs, succeeds in cleansing his affected skin of its impurities, and by a judicious use of its most healing waters, gaining strength of import to his inner self.

In Arkansas, of late years, a valuable boiling spring has been discovered, the properties of which are not yet fully determined; but it is thought by some‖ that ere long its capabilities will secure much to the physically distressed, and in time prove a source of specific cure in disease and a benefit to mankind in general.

The mineral waters of Avon (Livingston county, N. Y.,) have proved effectual in the alleviation of chronic disorders and annoying eruptions. "To know the composition of a mineral water is to precede, in some degree our experience," was the remark of one of parts.*

Hence we find that, soon after the records of a few beneficial results are obtained, a careful analysis is the consequence; physicians become well aware of what they prescribe, and the expression "la science des eaux minerales est a refaire,"† which was made many years ago, has proved of use by calling some attention to the great deficiency of data. While Dr. McLean strongly advocated the Saratoga waters in cases where the digestive apparatus had been enfeebled by excess of living, and Dr. Parry spoke earnestly of the remedial agency of the Bath waters, England; Drs. Salisbury and Francis maintained the inestimable value of the Avon Springs, which are annually becoming better known and more gratefully appreciated. Though sulphur be a laxative and diaphoretic and most beneficial in its action on the alimentary canal "with hydrogen, oxygen, and the alkalies, it forms a compound which is soluble in water," etc.‡ Though sulphuretted hydrogen was discovered by Schœle in 1727, its advantages are daily becoming more important; and, as a detective test, it is alone an indispensable ally. When such men as Bordeu, Home, and Mascagni recommend the judicious use of hydrosulphurous waters in cases of diseases of the urinary passages, there exists sufficient evidence that they possess certain virtues of no ordinary character.

In Europe nearly seven-tenths of the remedies prescribed by attending physicians may be said to be through the direct assistance of medicinal waters. Among those more generally popular with nomadic sojourners are Wiesbaden, Nassau—introduced in 1823, by the practical Kastner; the Vichy, France—extolled by Berthier in 1822; Leamington, England—described by Thomson in 1830—now the fashionable resort of decrepid plenitude; and Pyrmont, Germany—the popular prescription of the versatile Struve. There are about fifty mineral springs in Europe, which are, in verity, the comforts of old age—the tonics for anæmic fe-

* Dr. Saunders.
† Dr. Leake.
‡ Cullen.
§ Milton.
‖ Prof. Van Buren.

* Bergman.
† Alibert.
‡ Alibut Pricis Historique sur les eaux minerales.

males and the purgatives for lazy loungers. They become the focus of those persons who enjoy a delicate quiescence and the privilege of convalescence. While they benefit, each month, emaciated hundreds, they remove from the diathesis of thousands the exciting causes and morbific agencies.* So universal is the prejudice in favor of this liquid medicine, that scarce a family in high life, anywhere throughout well-educated kingdoms, but on certain shelves in their wine cellars, in suggestive rows possesses bottles of imprisoned health and chained humanity.

The BAIN HYDROFERE, an ingenious and hygienic invention, now used in the Hospital at St. Louis, France, the production of M. Mathieu (de la Drome) which possesses the power of forcing the "*dust* or dew of water," through a small aperture in a box, has received the highest encomiums, and is eminently calculated to prove of importance to the medical profession. When it is known that water can be forced through the "pores of cast-iron under the pressure of seven thousand pounds to the square inch," a suggestion might be derived from this with reference to making it exude through the far less compact woody fibre that is used.

The two new metals, Cœsium and Rubidium,† whose future usefulness cannot be estimated, owe their origin to the "mother-waters of different saline solutions." In order to obtain but sixteen grammes of cœsium, it is necessary to "use the solid residue left by twenty tons of the mineral water of Kreuznach." This fact is of lasting utility in the analysis of waters. For in them is concealed latent wealth.

The elaborate remarks of Dr. Hanbury Smith, concerning mineral waters and their uses,‡ render it needless, as it would be impossible for me to enter into the subject with any degree of self-possession or the slightest prospect of ultimate success. One who has devoted years exclusively to the consideration of mineral waters alone; who, by immediate and personal investigations of the most approved springs; whose "spa" has become a feature even in busy, bustling, proud New York; and whose wide experience amply fits him for the task of clearly and as critically writing out the soundest thoughts, is a sufficient and practically good authority for the modern practice of a conscientious school.

O munera nondum intellecta deum ? §

"Thou chiefest good,
Bestowed by Heaven, but seldom understood."

*See the table of Dr. Pereira for a concise description and analysis of the principal waters.

† Discovered by Messrs. Kirchoff & Bunsen.

‡ Now publishing in the New York American Medical Times.

§ Lucan.

To be Continued.

Hints and Observations on Military Hygiene, relating to Diet, Dress, Exercise, Exposure, and the Best Means of Preventing and Curing Medical and Surgical Diseases in the Army.

BY A HOSPITAL SURGEON OF PHILADELPHIA.

(*Continued from page* 30.)

GUN-SHOT WOUNDS OF THE HIP JOINT.

Military surgeons all agree in the almost certain fatality of gun-shot wounds of the hip-joint. In such severe injuries, three courses are open to the surgeon—First, to leave the case to nature; secondly, to amputate at the hip-joint; thirdly, to resect the joint. When left to nature, the patient dies in a few weeks or months, worn out with pain and suffering; submitted to amputation at the hip-joint, he rarely survives. The operation by which he has the best chance for his life is resection, which was first performed for gun-shot injury by Oppenheim, and more recently, under Stromeyer's direction, by Dr. Schwartz, in May, 1849.*

The whole number of cases of resection of the hip-joint which has been performed (up to 1860) is 71, the first operator being Anthony White,† in 1815 or 1818, and the results being 33 deaths, 33 cures, and 5 unknown. Dr. John Rhea Barton was the first American surgeon who performed partial resection with success, in 1827; about four years after, Dr. J. K. Rodgers, of New York, performed the same operation with equally good results, (1840.) Subsequently, in 1844, Mr. Ferguson excised the head of the bone for caries, successfully.

GUN-SHOT WOUNDS OF THE KNEE-JOINT.

These wounds are considered very dangerous, owing to the laceration of the capsule, which has led to the practice of amputation. The following are the results of resection of the knee-joint, which has been performed in 183 cases, the first operator being Filkin, of Northwich, in 1762, the results being 54 deaths, 125 cures, and

* This operation consisted in removing the lower fragment with the saw, and in ex-articulating the upper one—it was neither difficult of execution, nor attended by hemorrhage, yet, after some days, the patient died of pyemia, and, on autopsy, it was found that a part of the ischium had been shattered by the bullet. Dr. Stromeyer's conclusion is, that he should, in any case, as Oppenheim, give the preference to resection, and that after the occurrence of suppuration, because then the operation is much easier, and because after some continuance of the formation of matter, it can better be expected that the patient will not sink under pyemia.

† This bold and hazardous operation was first recommended by W. Charles White, of Manchester, in 1769.

4 unknown; partial resection of the knee-joint in 36 cases, the results being 16 deaths, and 20 cures. Stromeyer says of gun-shot injuries of this joint—I have not undertaken resection of the knee-joint because it affords little hope, even under favorable circumstances, and because, in the majority of cases, it cannot certainly be known how much of the bone should be cut off. Three cases are all that have been reported by military surgeons: one in the Schleswig-Holstein war, and two in the Crimea, two fatal, one recovery.

We are glad to see that the Medical Director of the United States army desires that exsection of the shoulder and elbow-joints shall be resorted to in preference to amputation, in all cases offering a reasonable hope of success, and that Pirogoff's operation at the ankle should be preferred to Chopart's, through the middle of the ankle.

GUN-SHOT INJURIES OF THE FOOT.

Dr. Stromeyer considers the most dangerous are those caused by fragments of bombs; the whole number which he has seen proved fatal, either by mortification and rapid collapse, or by tetanus. Injuries of the foot by musket bullets are not so dangerous, and heal well under favorable circumstances. The number of cases of total resection of the foot-joint, 22, amongst which are 3 deaths and 19 cures; partial resection of the same in 77 cases, 8 deaths and 69 cures.

RESECTION OF THE ASTRAGALUS.

There has been 67 cases of resection of the astragalus, 9 deaths and 58 cures. Fab. Hildanus being the first operator, in 1670.

GUN-SHOT INJURIES OF THE CALCANEUM.

The calcaneum has been resected in 84 cases, with only 1 death and 83 cures, the first operator being by Fornisus, in 1669, etc. (Heyfelder.)

Grazing shots, with exposure and injury of the *calcaneum*, heal successfully under simple treatment; so, also, of the tarsus.

Of the many gun-shot injuries of the *metatarsus*, which Dr. Stromeyer has seen, one only proved fatal.

As regards injuries of the *Toes*, the same treatment holds good for them as for injuries of the fingers; he considers amputation as unnecessary, as recovery readily occurs without its employment. As, however, much pain is occasionally experienced, opium must be administered, and poultices should be employed in good time. It will thus be seen that he differs from the great English authority, Guthrie, who asserts that amputation generally follows the use of the poultice. Without going as far as Guthrie in the condemnation of the poultice, we have seen, both in hospital and private practice, injury from the long-continued application of them; they require care in their management, and should be omitted as soon as the surgeon considers proper, and not depending on the feelings of the patient.

AMPUTATION.

Derived from the Latin Amputo, to cut off.—We divide the operation into circular, flap, and oval. Next as to time of operating, called primary, if performed as soon as the patient become fit for it, after the reception of any injury. Wait always until reaction comes on. If the limb be mangled so as to be useless, give him stimulants, tranquilize his mind, let his skin become warm, then operate. On the field, hospital, and in private practice, this is the best and most successful period. Secondary amputation is that performed after the suppurative process has set in, and life is endangered from sloughing or the suppuration; this is more fatal than primary. The operation of continuity are those performed through the body of a bone; those of contiguity are performed through a joint, while those of necessity are such from the magnitude of the injury. Those of choice, when the limb has become partially or entirely useless. Never amputate if the limb is the slightest degree useful, or to gratify a patient's whim. The circumstances which are favorable for the operation are youth; habit somewhat reduced, but not too weak, cheerful temperament, good general health, simple wound, disease or accident, at a distance from the trunk and the upper extremities. Though a most simple operation, statistics show it to be a most hazardous, and therefore demanding the highest surgical skill as to its propriety and the proper time. Its mortality is greater than that for the operation of stone, being one-third or one-quarter, while stone is only one-eighth. Never operate unless compelled by necessity to do so, until you have prepared your patient, if he is debilitated and have hectic fever; stimulate, give him good nutritious diet and opiates; keep him in a dark room, and always use ether, or a mixture of ether and chloroform, as patients in such a condition can bear but little pain. If he be vigorous and reaction is considerable,

bleed. The following are the most important points of the operation. The patient is placed comfortably recumbent on a board or table of convenient height for the operation. The surgeon places himself on the left of his patient, so that he can use his right hand. The sound limb is held steady, and out of the way by an assistant. Another trustworthy assistant is ready to control the hemorrhage, by the pressure of his own fingers, or by the tourniquet, (but pressure should not be applied until the knife is just about to cut, so as to avoid venous congestion. Have conveniently arranged near you: ether, chloroform, tourniquet, bandages, lint, ligatures, silk and silver sutures, knives, saw, cutting-pliers, artery forceps, sponges, oil, brandy, wine, and water.

As the circular amputation was the first one used in surgery, we shall describe it first. It was introduced by Celsus, and modified by Dessault. Some are great sticklers for this operation, but I prefer the flap from the fact that it takes less time, three-quarters of a minute are enough, while five or six is required for the circular.

The circular amputation is performed thus, supposing the thigh to be the part concerned. An assistant, grasping the limb with both his hands, draws up the skin as far as possible. The surgeon holding the knife lightly, and with his arm at first placed under the thigh, divides the skin and cellular tissue in one continous sweep, and turns it up like a coat cuff. The muscles are then divided in two successive layers, each layer (being held upwards by a retractor, a portion of linen or leather slit at one end,) in such a manner that their contraction will form an inverted cone, and the vessels tied. Flaps are brought together, so as to form a line from before backwards, if the patient lie upon his back, or laterally, if he lie upon his side, to let the pus and fluids escape from the wound. It is less difficult to secure the vessels in the circular operation. It is best to be applied to those limbs containing but one bone, and not much muscular tissue.

The flap operation was first introduced in England, and afterwards modified in France. It consists in making a single or double flap, this flap having the shape of a cone, the apex being at the bottom of the wound when the bone is sawn off. It is generally performed with a long knife, called a catlin. After applying compression to the main vessel, the muscular tissue is seized with the hand, the knife plunged to the bone, passing over it, and carried out at the opposite side, sliding it down with a sawing motion sufficiently far to make a proper flap, then withdrawn, and passed out on the opposite side. If a single flap be made, that must be sufficient to cover the whole wounded surface. The third or oval operation was introduced by Langenbeck; the wound has an oval shape; best applied at the shoulder, and commissure of fingers and toes. For the operation at the shoulder, the operation of Baron Larrey is preferred.

The dressings, after the amputation, should be of the most simple kind. Sutures of silver wire or silk, strapping with adhesive plaster, lint or linen dipped in cold water, and careful bandage. Some most serious accidents, at times, occur during and after the operation, as for instance, hemorrhage, intense pain from ligature of nerve, etc., and even convulsions. Since the introduction of ether and chloroform, the three latter have been almost entirely overcome. Your patient must, therefore, be carefully watched. Arrest hemorrhage by the ligature and astringents, as before described. *Inflammation of the stump*, on its first appearance, use active antiphlogistic means to arrest it. *Conical stump;* this is caused by the surgeon not saving sufficient flap; this can only be cured by a second operation; cicatrix is sometimes very tender, and bleed on applying an artificial limb, or small tumors form on the end of the stump; apply astringents and tincture of iodine, or even remove the tumors. If abscesses and sinuses of the stump occur, let out the pus, placing the opening in the most dependent position. Necrosis and caries of the stump were common under the old mode of heavy top dressing, since the employment of light and cold water not so much trouble arises from this source. Cystitis sometimes occurs, known by all the signs of irritable bladder, at first increased desire to urinate, etc.; treat antiphlogistically at first, followed by opiates; phlebitis, followed by metastatic or pyemic abscess in the brain, lungs, or liver, treat by mercury and opium.

AMPUTATION IN GUN-SHOT WOUNDS.

Period for Primary Amputation.—The great majority of intelligent and well read surgeons adhere to the principle which was introduced into practice by the English and French military surgeons during the wars of Napoleon, by

amputating, as soon as possible, after the wounded man has recovered from the first shock. The great importance of this recovery I have dwelt upon before, wine or brandy being administered before the use of the ether or the chloroform.

The three Schleswig-Holstein campaigns, and the results of the Crimean war, afford new proofs of the correctness of these principles. Amputations within the first twenty-four hours give the best chances for the preservation of life. On the second day the prognosis is somewhat more unfavorable, if the wounded have been conveyed to a distance, and the limbs are infiltrated; on the third and fourth days the prognosis is worse, but improves gradually from the sixth day.

Drs. Tripler, Gross, and Hamilton, in their works on Military Surgery, when treating of amputation, are agreed in advising the primary operation. Tripler recommends the adoption of the flap operation in the arm and thigh, but prefers the circular for the forearm and leg, where time is of great importance. Hamilton advises the flap operation. Dr. Scrive, Surgeon-General of the French army in the Crimea, makes but one exception to the rule of primitive amputation, and that is in the operation at the hip-joint.

Period for Secondary Amputation.—According to Hennen and Stromeyer, this operation should only be performed after the patient has been removed into a pure atmosphere, and a free supply of it, and then select the most favorable period for its performance.

2. This operation should be performed in cases of gangrene, where it is not likely that a stump suitable for healing will be formed.

3. In cases of arterial hemorrhage, complicated with gun-shot fracture, where the hemorrhage cannot be arrested by the ligature at a distance from the wound.

4. In cases of profuse suppuration.

5. For deformity or uselessness of a limb.

6. In all cases in which the diagnosis has been established too late to admit of primary amputation.

The following are the Indications for Amputation or Exarticulation on the field of battle.—The precision and rich original experience, which are shown by Dr. Stromeyer, on this important subject, induces me to lay the following extract before my readers.

General Indications.—1. When a large limb has been carried away by any projectile, and it is desirable to replace the contused and lacerated wound by a clean one; if the bone projects, this must also be sawed off. 2. Fingers and toes scarcely ever require amputation; of seventy-three gun-shot fractures of the hand and fingers, seven only were amputated. 3. When the lesion of a limb is such to preclude the possibility of its further existence, dependent upon nerves and blood vessels; or of its usefulness, dependent upon bones and muscles. 4. When a grazing shot of heavy calibre has left the skin uninjured, but has destroyed the bony and soft parts—Dr. B. Beck,* a distinguished surgeon of the Austrian army, performed amputation in such a case.

Special Indications.—I. Upper extremities. The indications differ from those presented in injury of the lower extremities, because, according to the statistics of Dr. Esmarch, all wounds of the upper limbs heal more readily than wounds of the lower, and wounds of the right arm with more readiness than those of the left. Amputation of the upper extremities is indicated only when vessels and nerves are injured at the same time, or when fracture exists along with rupture of the great blood vessels, or after considerable loss of substance of the soft parts.

The special indications are:—1. When the arm has been carried away by a large projectile, or has been lacerated and broken to such an extent as to preclude the possibility of its preservation. In the diagnosis of these cases great care is required to ascertain whether the organs of the chest or abdomen have sustained injuries which necessarily must be followed by fatal results. 2. When the brachial plexus has been divided by a shot in the upper arm, so as to deprive the whole hand of mobility and sensibility. Under these circumstances the brachial artery must have been torn, and the radial pulse have ceased. 3. When the humerus is fractured and the brachial artery is torn. Even if there is no hemorrhage at the time, the cessation of the radial pulse is sufficient proof of the division of the artery. 4. When the elbow joint is shattered, and the brachial artery divided. 5. When the wrist-joint or wrist has been perforated by a ball in one of its larger diameters.

*It is with pleasure that we record the following order of an Austrian general, addressed to his troops. "I see everywhere military officers and surgeons equally exposed to the fire, and, therefore, the surgeons shall enjoy advantages and distinctions in every respect equal to those officers." He kept his promise, as Dr. Beck returned with the well-deserved order of merit, I sincerely trust our government will follow so good an example.

A shot, piercing the wrist in the direction from the dorsal to the palmar surface, without injuring either radial or ulnar arteries does not involve the necessity of amputation. No lesion of bones of the upper extremities, by either rifle or cartridge-ball is, in itself, an indication for amputation. Wounds of the brachial artery alone, do not require amputation. Rupture of the median radial, or ulnar nerves alone, or in combination with gun-shot fracture, does not involve the necessity of amputation.

II. *Lower Extremities.*—1. When a part of the leg has been carried away by a heavy shot, or has sustained an irreparable loss of soft parts, or has suffered a subcutaneous comminuted fracture, with crushing of the soft parts. 2. When the crural or popliteal artery and vein are ruptured, and the circulation in the lower part of the limb has ceased, even if there is no hemorrhage from the wound for the moment. 3. When the femur is shattered and its fragments have been carried in the direction of the large blood-vessels. 4. When the femur is shattered to a great extent, upwards and downwards, as is frequently the effect of a grape shot. 5. When the femur is broken, and the sciatic nerve ruptured. Division of the sciatic nerve alone does not indicate amputation. Dr. Stromeyer saw the injury three times followed by a favorable result. In one case trismus supervened. In the favorable cases paralysis continued in the parts supplied by the nerve, but the limb was still more useful than a wooden leg. 6. When the knee-joint has been perforated by a ball, and its articulating ends are shattered to such an extent as to give rise to immediate inflammatory swelling, should the patient require to be removed. Even in those cases where, after perforation of the synovial membrane, the lesion of the bone consists only of a simple impression or contusion, amputation is, according to universal experience, the only means of saving the patient's life. But, in this case, the operation may be delayed till the patient has arrived in a hospital, conveyance not having the same injurious influence upon the state of the wound as it has when extensive shattering is present. 7. When the tibia has been extensively shattered directly below the knee-joint, so that fissures enter the joint, which can be ascertained without difficulty. In this case, too, it is advisable to delay amputation till the arrival of the patient at the hospital, if it be near. 8. When the tibia and fibula have been fractured and extensively shattered by a ball. Under various favorable circumstances, however, the leg may be preserved in this case. 9. When the tibia alone has been shattered to a large extent. In this case the leg may possibly be saved, but this is not very probable. 10. When the ankle-joint has been perforated by a ball in one of its longer diameters, so that extensive shattering or splintering of the tibia or astragalus, or of both, may be inferred to have been produced. Simple grazing shots, with opening of the synovial membrane of the ankle-joint, admit of conservative treatment, with the exception of those cases in which a great portion of the malleolus externus has been lost; an injury which causes the foot to take the shape of a valgus, and makes it useless. 11. When the anterior part of the foot has been crushed by heavy shot. The only lesion of the foot by rifle-balls, requiring amputation, is shattering of the astragalus, as a component part of the ankle-joint.

An Anomalous Affection—was it Hydrophobia?

By H. C. PAIST, M.D.,
Of Philadelphia.

On Friday morning, October 4th, 1861, I was called to see Lewis Devoe, and on inquiry of his brother, I found that he was about forty-four years of age; that he had been for over a year on board his vessel acting in the capacity of cook, that his health as a general thing was good, though not a robust man, his health having been much injured by intemperance, but for the last year he was very temperate, drinking little or none. On the morning of October 3d, he complained of a peculiar itching and burning over the body, extending to the tips of his fingers and toes; he said this sensation was wave-like, rolling from the centre to the extremities, and remarked through the course of the day that he felt occasionally a choking sensation and pain about the glottis—felt generally prostrated and dull; did not care to be on deck, but preferred solitude, moving about with unusual caution. His brother prevailed on him to take some brandy, thinking it would stimulate him and instill new vigor into his frame; he gave him part of a glass, and for the next half hour, being engaged about the vessel, took no notice of him, but found at the end of that time that he had taken only a tablespoonful of the brandy—ques-

tioned him as to the reason, but he did not seem able to give one,—only it seemed impossible for him to drink any more. On the morning of Oct. 4th, the symptoms narrated, becoming greatly aggravated, appearing to be in great distress, his brother became alarmed, and had him taken to the place above mentioned. The symptoms now noticed, were violent convulsive tremors of the whole system, most piteous groaning and shuddering, intermitted with only momentary calms, mind perfectly clear, questions were answered rationally, but with hesitation and violent shuddering effort, the expression of countenance was that of a man suffering the most intense tortures imaginable. I asked him if he had pain, and with a great effort he answered, "no, none except a little about the throat and stomach," which he accounted for from frequent efforts to discharge phlegm from his throat, which efforts sounded like violent retchings; I inquired as to the condition of the bowels, and was told that they had not been moved for five days, not since he had taken a dose of anti-bilious pills to remove a headache; which operated freely, and he said did him much good. His pulse was about 90, weak and somewhat intermittent, extremities cold, in fact the whole surface of his body was below the standard temperature. He also complained of the itching and tingling mentioned by his brother; the least touch on his person by another would throw him into the most violent jactitations from head to foot, with dreadful choking, and earnest appeals, "don't, oh! don't touch me." I noticed a wash-bowl near by his bed, containing about a half pint of saliva; I directed his attention to it, and asked him if that was *water;* the mention of water convulsed him to a dreadful degree, and he cried out don't! dont!! Not wishing to fill those present with alarming apprehensions, I endeavored to calm him by dropping the subject. I ordered him pills of morphia and assafœtida, and after giving some other directions, left him, promising to return in the afternoon. On my second visit, I found all the symptoms aggravated. I no longer kept my suspicions to myself, but let the family know them, and requested of the brother the privilege of bringing in another physician. I called in Dr. H. Rihl, and we made a number of experiments, such as offering him water, pouring water from one vessel into another, took a lighted candle before him, directed his attention to a looking-glass which was in the room, fanned him in the face, and again behind him when he was not aware that any one was about to fan him, slipped around behind him and touched him, struck the floor with a cane, and many other trivial experiments, all with the same result, followed by the most violent and shocking contortions of the whole body, choking and copious expectoration of saliva. We asked him if he suffered pain in any way, his answer was "no;" we then asked if he had been bitten recently by a dog or any other animal, his answer was, that 18 or 20 years ago, a watchman's dog near Coates and Front streets, had bitten him, but the condition of the dog he did not know, nor never heard afterwards. He had not taken many of the pills—could not swallow them; we tried to get him to swallow one, but without success, the very thoughts of swallowing appeared to convulse him. At this visit, we directed a blister along the whole extent of the spine, to be followed by a dressing of morphia. Called again at 10 P. M., found our patient worse in every respect, mind wandering slightly, pulse weaker and more frequent, extremities cold, general distress increased, convulsive jerkings much more frequent, spitting large quantities of saliva all around him on the bed or on the floor, or anywhere; this we noticed particularly from the fact of his observing much care on our previous visits where he spat. We endeavored to give him chloroform by inhalation, but with ill-effect. He seemed to have an idea that we were trying to smother him to death, indeed he seemed apprehensive of danger from every one around him; however, by much perseverance we succeeded in getting him to inhale enough to slightly quiet him. We directed his brother how to use the chloroform, and left him promising to make an early call the next morning, and on calling were informed that he had died about 4½ A. M. Were told that chloroform was kept almost constantly to his nose, but without much effect, he died in a sane state of mind, the symptoms continuing to death.

My object in placing this case before the medical world, is, to ask, was not this a genuine case of hydrophobia, resulting from the bite of a dog eighteen or twenty years ago? (for he declared that that was the only bite he had ever received from an animal,) if not, what was it?

The Late Arctic Expedition records that the greatest cold experienced by them was sixty-eight degrees below zero.

Notes on the Narcotics.

By EDWARD PARRISH,
Lecturer on Pharmacy, Philadelphia.

An experienced medical practitioner, in a recent letter to his office student, in attendance on medical lectures, advises him to acquaint himself thoroughly, during his term of sudy, with affections of the nervous system, as upon a thorough kuowledge of these, and their treatment, his success in practice would mainly depend.

That this advice accords with the prevailing ideas of physicians, is especially obvious to the pharmaceutist, who, in comparing the recent prescriptions, on his files, with those of twenty years ago, cannot fail to notice the increased use of medicines primarily affecting the nervous system, instead of mercurials, drastic cathartics, blisters, and the like, formerly so much relied on.

From an analytical table of prescriptions which I prepared some five years ago, from my own files and those of several pharmaceutical friends, it appeared, that on an average 24 per cent. of the prescriptions examined, contained either opium, morphia, or hyosciamus, in one or other of their preparations, while the mercurials of all kinds, of which blue pill is now by far the most popular, were directed in 23 per cent. of the prescriptions; iodine and iodide of potassium in only 6 per cent., and though the files were examined with reference to the different seasons of the year, cinchona, and its alkaloids, only appeared in 9 per cent. of those written in Philadelphia. The preponderence, here shown, would, probably, be greatly increased in case of the preparations of opium, if the medicines dispensed without prescriptions were taken into account. Laudanum and paregoric are found in almost every dwelling, at all provided with medicines, while the great variety of carminatives and infant cordials, given so indiscriminately and so injudiciously, nearly all contain opium as their most active ingredient.

In estimating the reliance placed by physicians upon narcotics, by the data above given, allowance must be made for their extensive employment as correctives of the undue influence of agents primarily affecting the secretions. This is, indeed, one of their chief uses in prescribing, and in the case of opium, especially is, perhaps, often resorted to from habit, rather than from any indication in the symptoms.

Next to opium hyosciamus is the most popular of the class of cerebral stimulants; its relaxing effect upon the bowels, secures its substitution for opium in very many instances; as an alterative, also, it shares with conium, belladonna, and stramonium, considerable reputation in appropriate combinations. The prophylactic effects of belladonna, its asserted specific influence on certain eruptive diseases, and its well known usefulness is opthalmic surgery, give its extract and alkaloid, atropia, prominent positions in the class. Conium is not unfrequently prescribed with sarsaparilla and the mercurials, while stramonium is less in repute for internal use than in ointments applied to hœmorrhoids. Stramonium leaves are much employed for fumigation in asthmatic affections, a practice frequently productive of speedy relief, notwithstanding its alkaloid, daturia, is not volatile; that of conium being freely so its leaf might be supposed to furnish a much better material for the fabrication of asthmatic paper and segars. Another eligible mode of administering this class of remedies, especially those containing volatile principles, is by inhalation in connection with the vapor of water; the inconvenience of the method and the want of suitable apparatus have sometimes operated against a trial of its merits; there is no real difficulty, however, in adjusting a good inhaler, when not readily accessible, by the use of a wide-mouth bottle and glass tube.

Of all the narcotics, none has received so great an impulse, in our time, as Indian hemp. The incredible stories recorded by travelers in relation to the effects of *hashish* on the impressible natives of the East Indies, have given it a world-wide notoriety as an intoxicant, while the efforts of certain empirics, among us, who have advertised it extensively, under the plea of disinterested humanity, have drawn the attention of thousands, both in and out of the profession, to its availability in the treatment of phthisis. The extract of cannabis has, certainly, become one of the most popular, as it is one of the best of its class; its chief advantages are the exhilaration which accompanies, or rather precedes its complete narcotic effect, the remarkable control it exerts over nervous inquietude and the absence of any noxious effect, either in diminishing the appetite, checking the secretions or constipating the bowels. The quality of the preparation is so varied, that physicians are often quite uncertain what dose to prescribe; some specimens seem nearly

inert, while of others half a grain is a powerful dose, and a grain has produced alarming symptoms. It is always best for the physician to assure himself beforehand on this head. It should be of a bright green color, heavy narcotic odor, and entirely soluble in alcohol. Squire's London manufacture is esteemed the best. In prescribing extract of cannabis, in liquid form, the most approved combination is with carbonate of potassa, which renders the extract soluble in water, otherwise, dissolved in alcohol, it readily separates on being added to aqueous and even mucilaginous preparations. I have met with one case only in which extract of cannabis produced those extraordinary hallucinations to which I have referred as being ascribed to *hashish* in the East. This patient, a consumptive, was often possessed with an idea of his own duality, seeing horrid visions of detached portions of himself. He seemed to be continually haunted by the presence of an imperious director, on whose behalf his most trifling acts were performed. At times, even in the act of expectoration, he believed himself the agent of another for whose sufferings he felt the keenest sympathy.

The very extensive use made of lobelia and sanguinaria in this country, would, I think, surprise our transatlantic colaborers. The combination, in these remedies, of narcotic with emetic and diaphoretic properties, fits them for a great variety of indications, though they seem to me by no means so safe and harmless as some rather adventurous prescribers seem to suppose. A plant of the famous solanaceæ family, to which belladonna, stramonium, and hyosciamus belong, yields us the alterative narcotic dulcamara, of which we have only two preparations in the Pharmacopœia—the decoction and aqueous extract, neither of them very eligible or apparently satisfactory to the profession.

One very prominent element in the popularity of a remedy is its pharmaceutical eligibility, and there is little doubt that the neglect into which many valuable drugs have fallen is due chiefly to their not being presented to the practitioner in an eligible shape. Since the general abandonment of the crude and inelegant class of infusions and decoctions, there has been a manifest tendency to employ more concentrated and reliable preparations; but the Pharmacopœia, never in advance of the demands of the profession, has given no formulas in the cases of many of the most valuable. That this may be partially remedied in the edition now under revision by the eminently judicious and conservative committee appointed in Washington some eighteen months since, is greatly to be desired.

Fluid extracts are now loudly called for on all hands. That many of this class of liquid preparations originated, and have come into use through the commercial enterprise and activity of certain manufacturing pharmaceutists, not amenable to the careful scrutiny of the profession and the public, and whose processes are too uniform to be properly applicable to every drug, is no argument against the excellent scheme of concentrating liquid preparations to such point as that their dose shall have the same relation in each case to that of the drug from which derived. Modern pharmacy, with a full appreciation of the composition of almost every drug known to the profession, is now prepared to adapt solvents to each, which will fully extract its medicinal principles, discarding those which are inert, and, by processes of evaporation within the reach of every apothecary, to reduce these to concentrated and permanent forms. The alcohol is sometimes an objection in tinctures, from therapeutic incompatibility, while in syrups, which are always given in comparatively large doses, the sugar is equally objectionable. Fluid extracts, besides the advantage of correspondence of dose with that of the drug, contain a minimum of either of these antiseptic ingredients. They are, however, best adapted to drugs the doses of which are not very small, and I can see no advantage, for internal use, in more concentrated liquid preparations of the powerful narcotics than their tinctures already furnish, especially as the solid extracts are so easily incorporated with extemporaneous mixtures. The imported preserved juices are not recommended so much for greater concentration as for their careful preparation directly from the fresh expressed juice of the plant before it has been altered by any processes of drying and subsequent treatment with menstrua.

In this connection it may not be out of place to notice some facts in regard to the preparations of opium, of especial advantage in those cases in which Laudanum is contraindicated by its nauseating effects and the disagreeable symptoms produced as its effects are passing off. McMunn's elixir has attained a place among the popular preparations of opium from the absence of these objectionable qualities,

and the only obstacle to its use by physicians lies in its being a nostrum, the mode of preparation of which is carefully concealed. The prevailing opinion among pharmaceutists appears to be that this is an aqueous preparation, to which, after its completion, a very little alcohol is added to prevent decomposition, and, on this principle, numerous elixirs of opium are offered, though, as might be expected, McMunn's still takes precedence. The aqueous extract is a preparation well worthy of a fair trial in competition with the drug itself, or its tinctures; on theoretical grounds, it gives promise of good results. I have met with practitioners who unhesitatingly give the preference to black drop and acetated tincture of opium, which they recommend as greatly preferable to the ordinary liquid preparation, while certain confirmed opium-drunkards give their testimony in the same direction, asserting that these preparations, containing morphia as acetate, produce less emaciation from their habitual use than those containing the natural salt, meconate of morphia. On the other hand, I have lately imported from London an elegant preparation called solution of bi-meconate of morphia, resembling McMunn's elixir, though still more completely deprived of odor, and apparently quite free from the usual objections to laudanum.

What is the dose of the morphia salts? One-eighth of a grain, say the older books and prescriptions; one-third of a grain, say recent authorities; one grain, say now a great many physicians, not only here but elsewhere. Formerly I hesitated to compound a prescription calling for this dose, now it is so frequently prescribed and administered, that we begin to regard it as safe, and cannot help setting down the fact as an offset to the asserted lessening of doses to meet the demand of the times.

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Sudden Changes in the Color of the Hair.—At a meeting of the British Association for the Advancement of Science, Dr. John Davy a read paper on this subject. He drew a comparison of some changes which occur in the feathers of birds and the hair of animals, and urged that the changes of color of hair were rather due to displacement of structure than to modification in its color. Physiologically there was no proof, in his opinion, that the hair ever changed color suddenly from mental emotion. He had immersed hair in caustic potash, exposed it to chlorine and other agents, without producing any sudden change. It was, therefore, scarcely to be conceived that the human subject could secrete a fluid capable of affecting the hair by discoloring it.

Illustrations of Hospital Practice.

PENNSYLVANIA HOSPITAL.

MEDICAL CLINIC.

Service of Dr. J. F. Meigs.

Oct. 19, 1861.

GONORRHEAL RHEUMATISM.

This was the case of a man, thirty-six years of age, admitted on the 8th day of September; had been sick a week before he came with rheumatism of both wrists, which were exquisitely painful and tender to the touch; could hardly bear to have them moved, and any movement gave the keenest pain; they were swollen; scarcely any fever; no cardiac complication; there is some inflammation, and swelling of joint of middle finger, with erosion of cartilage perhaps. Desiring to make further trial of a remedy which has proved exceedingly valuable in the treatment of acute rheumatism in this hospital, he took propylamine, 3 grains, every four hours until the 16th of September, together with the usual local applications, but the disease persisted. He was then put upon the alkaline treatment, and took acetate of potash, 15 grs., water, 1 gill, every four hours, with four grains Dover's powders until the 26th. But the pain was still persistent; it obstinately refused to yield to the usual treatment of rheumatism.

Suspecting gonorrhea, he was next put upon the use of equal proportions of bichloride of mercury and iodide of potash, together with mercurial ointment and belladonna, and he is now improving. He tolerates better the manipulation of his wrists and arms; the swelling is subsiding. He has also taken the compound tincture of gentian, with the citrate of iron.

This affection attacks the joints, and its peculiar characteristic is that it is not movable. Unlike other forms of rheumatism it fastens upon the joint, and refuses to yield to any of the ordinary methods of treatment. The extreme acuteness of the pain attending it is another characteristic, and those together may be considered pathognomonic.

CANCER OF PANCREAS.

This case was a female, forty-nine years of age; for nineteen years a cook; always enjoyed good health; never sick in her life till about three months before she was admitted to the hospital on the 21st of Sept.; came in from the country; had severe jaundice; skin very deep color, almost olive green from the presence of coloring matter of bile; had vomiting; some pain, and soreness of epigastrium and in back; abdo-

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men somewhat distended; rounded projection of the lower third; no enlargement of liver; urine overloaded with bile; stools white, even lighter than clay; bowels costive; a peculiar symptom of the case was a blowing sound observable over the aorta, in the epigastrium, which I could best account for by supposing a tumor, or enlargement of the pancreas; indeed, this blowing sound may almost be considered as pathognomonic of tumor of some deep-seated organ. The jaundice was, no doubt, occasioned by the occlusion of the common duct of the liver and this by the pressure of the enlarged pancreas upon that organ. As the disease progressed, the pain was very deep in the back, she said; stools more yellow; skin more deeply colored; great loathing of food, and as the occlusion of the gall ducts became more complete, she became drowsy, delirious, and on Saturday last she died.

Post Mortem.—Liver diminished in size, but without any tuberosities or nodosities; hepatic duct enormously enlarged; had the appearance of a liver in which the bile has been entirely dammed up.

Duodenum—Upper section healthy, common duct of liver opening into it enormously enlarged; usually one or two lines in diameter.

Pancreas—Exhibiting all characteristics of carcinoma; white, fibrous, creaks under the knife, hard, enlarged; under the microscope the peculiar cancerous cells are plainly observable.

Some small quantity of fluid was found in the abdomen, but evidently of recent occurrence.

The lecturer, in concluding his clinic, gave the results of a microscopic examination of the liver, and a portion of its substance by Dr. Morton and himself, and exhibited to the class some elegantly colored drawings of same disease, or similar, drawn by a foreign pathologist.

CANCER OF ŒSOPHAGUS.

A woman, forty five years of age, admitted on the 8th of October, with tumor of neck of some months standing; four months ago she began to experience difficulty of deglutition; a month after the tumor made its appearance, and has been rapidly increasing since. That it was connected with the œsophagus seemed evident from the fact of the constantly increasing difficulty of swallowing and from its locality; the tumor was hard. On the 14th of Ootober she had stridulous respiration, but no alteration of voice. This peculiarity of respiration was unlike the croup, there was no inflammatory action, nor exudation of false membrane, and yet the disease seemed now to be complicated with some laryngeal difficulty. An opening had been made from the tumor into the larynx perhaps. The prognosis was unfavorable from the beginning, and death soon came to her relief, and I am able to point out to you the exact pathology of the case.

Post Mortem.—A section of the œsophagus in its superior portion exhibits a mass of fungus growth, nearly filling up the entire cavity. It is a white medullary substance, undoubtedly of cancerous structure, which so nearly closed up the œsophagus, as to leave an opening scarcely larger than a crow-quill. In the trachea, which exhibits no other traces of disease, we find an opening, which was probably made four days before she came here, and gave rise to the peculiar respiration before spoken of. The superior portion of the sternum and the lymphatic gland lying on its posterior surface also exhibit traces of cancerous deposits. Cancer of the œsophagus is a rare affection.

October 26, 1861.

CHRONIC RHEUMATISM.

A female, twenty-six years of age; widowed; in good health when married, though never very strong; had two miscarriages, at four months; last two years and a-half ago; since which had neuralgia, pain and weakness in the back and side. On the 4th of April last she was admitted to the hospital, for rheumatism, and in July was transferred to the surgical ward to be treated for piles. On the 6th of October was returned to the medical ward unimproved, so far as the rheumatic affection was concerned; her tongue was red, with a disposition to glaze and become dry, which is always indicative, to me, of a diseased stomach, or dyspepsia. She had no vomiting, no tenderness of the epigastrium, no gastralgia: she was anemic, and seemed to have no energy of mind or body. A peculiarity of her symptoms was severe pain in feet and ankles; extreme tenderness to the touch, or upon the least motion, and inability to walk. There was upon her left ankle an eruption of an erythematous, dark, copper-colored appearance, with desquamation of cuticle over a portion of its surface; no cardiac complication; no fever; lungs sound. The case is somewhat obscure, and difficult of treatment. She has been in the hospital seven months, and, until now, without much improvement. Her feet and ankles are now less tender to the touch; she can move them more readily; she can bend her knees, and she can stand upon her feet; her appetite is improved, and she sleeps better at night.

Such cases you will find, in your practice, not unfrequently, obstinate, persistent, refusing to yield to treatment. Despite all your philosophical reasoning, and the scientific application of remedies, you will find yourselves baffled by the persistency of the symptoms you seek to alleviate; but this should only stimulate you to still more careful examination of your case, to more thorough investigation. In the case be-

fore you to-day, then, what occasions this obstinacy? Can it be syphilitic? Such are my suspicions; whether such be the fact I do not undertake to assert, and the physician ought to be careful how he gives currency to suspicions in regard to the presence of such disease. Not only his own reputation, but the character of his patient is at stake, which latter, especially if it be a female, may be blasted forever by the breath only of suspicion. He may have his suspicions, however, and he may regulate his treatment in accordance with them, without communicating them to any one.

The treatment employed in this case, and under which improvement is taking place, is the following. She has taken: Bichloride of mercury, one-twelfth of a grain, iodide of potash, 5 grains—three times a day, until the 24th, when, finding the gums slightly touched, the bichloride was suspended, and the iodide continued alone. She has also taken infusion gentian, 2 drachms, citrate of iron, 3 grains, three times a day.

This two-fold treatment, by specifics and by tonics, seemed to be required by the peculiar nature of the disease. She has taken, also, cod-liver oil, a tablespoonful on going to bed at night, it being less likely to occasion nausea and vomiting taken at that time. As to diet, ask the stomach what it desires, and, with proper instructions as to quantity, the food craved may be given.

INTERMITTENT FEVER WITH ALBUMINURIA.

This was the case of a female, forty-five years of age, admitted to the hospital on the 14th of October, for intermittent fever; had been sick for three weeks; well-marked chills and fever; she was weak, languid; no appetite. She took four grains of quinine, four times a day; made no improvement. On close examination, I observed a slight puffiness of the eyelids, and a slight edœma of the ankles, with slight pitting; a little infiltration into the subcutaneous areolar tissue; These appearances were very slight indeed, but yet plainly observable to the practiced eye; the upper edge of the eyelid is now slightly transparent. An examination of the renal secretion disclosed the presence of albumen, and the microscope showed the tube casts, small, epithelial. She was immediately placed upon the use of tincture chloride of iron, 15 drops before each meal, and five grains of gallic acid after meals, together with the compound powder of jalap, quantum sufficit, to keep the bowels free. She is now improving. Test of urine by heat and by acid, gives very small quantity of albumen. The diet should be nourishing.

Note.—Several annoying errors have occurred in the clinical reports which have already appeared in the Reporter, which we take occasion to point out, though many of them are so palpable that the intelligent reader would readily observe and correct them.

In No. 3, page 58, second column, 14 lines from bottom, read *eight ounces* instead of "the ounce."

In No. 4, page 82, first column, 5 lines from bottom, read *castor oil* instead of "*turpentine*," add "*with* 10 *drops of turpentine*;" page 83, first column, last line, read *bark* instead of "*iron*;" second column, fourth line from bottom, read *necrosis* instead of "destruction;" page 84, second column, six lines from top, read *one-sixth* of a grain instead of "*six grains*;" first column, 21 lines from bottom, read "v" instead of "ij."

Medical Societies.

TRANSACTIONS OF THE BROOKLYN MEDICO-CHIRURGICAL SOCIETY.

Doctor Daniel Ayres, President.

October 22d, 1861.

Drs. Sayres and Bauer's

Case of Returning Cancerous Disease after Amputation.

Dr. Bauer placed before the Society a series of pathological specimens, consisting of:

1st. The stump of an amputated left thigh, removed at the hip-joint.

2d. The heart, with appending vessels and pericardium.

3d. A flat, oval tumor, about 3 ⋈ 4 ″, removed from the anterior surface of the left 8th, 9th, and 10th costal cartilages.

4th. Smaller tumors from different parts of the body.

In order to illustrate their original appearance in size and color, Dr. Bauer exhibited highly finished wax casts, prepared soon after death, from the specimens.

At the end of the stump, immediately above the cicatrix, there was a convolution of tumors, not less in size than a man's fist. Each nodule was as large as a walnut, and intimately joined with the others, adherent to the skin and loosely connected with the deeper parts. The skin was greatly discolored, bluish-red, and so rarified that the subcutaneous mass and its light yellow color could be perceived. The lowest nodule was implicated in the cicatrix. It was excoriated, and had been freely bleeding. The tumor, together with the cicatrix, exhibited a vermillion discoloration.

At the apex of the pericardium was a large and soft mass of cancerous material, which had almost penetrated it. In the front wall of the right ventricle was a small cancerous growth, slightly projecting beyond the surface; corresponding with this, there were three tumors, encroaching upon the right ventricle from between the fleshy columns.

The tumor from the thorax had originatod in the connective tissue of the peri-chondrium, and had penetrated the left rectus, spreading over it, and approached very near to the integumenls at one place. This, as well as the small tumors, was already softened, and the microscope revealed little more than a fatty metamorphosis.

In addition were found a large number of heterologous growths over the pleurae. Most of them were very flat and soft, and not unlike mushroons.

These specimens were removed from the body of the same gentleman, whose case had been discussed

a former meeting of the Society—May 28th—and which had enlisted so much interest on account of the doubt in the diagnosis. Whilst referring the Society to the transactions of that date, published in full in the Medical and Surgical Reporter, he reminded the members of the peculiar, soft, and brainlike material that filled the entire articular cavity of the knee-joint. The similitude of the same to softened cancerous structure had been striking to the naked eye, but its intensity had been proven by the microscope beyond the shadow of a doubt. Notwithstanding the microscopic results, clinical considerations prevailed in preferring *another* diagnosis, namely that of enchondroma. It should be borne in mind, that the articular tumor had been the *first* in the limb, that it was the *direct effect* of traumatic injury, to which it had been repeatedly subjected, until its size increased, and its *hard consistence* changed into a soft material. Further, that some six or eight hard, oval, and disconnected encysted tumors had successively formed in various parts of the extremity, near tendons, which, when microscopically examined, were recognized by some as enchondroma. (Prof. Jacobi, Noegerrath and himself,) and by others as sarcomatous, (Drs. Schnetter and Prof. Daniel Ayres.)

In consideration that both enchondroma and sarcoma may undergo structural disintegration, and by a process of fatty metamorphosis, may assume an appearance in every particular identical with encephaloid; further, that the articular tumor had once born the same peculiarities as the consecutive ones; again, that it was a common thing for enchondromata to appear in great numbers, whereas, primitive encephaloid most usually locates in one place—these and other considerations had prevailed in pronouncing the disease as enchondroma; yet he had not been positive in his opinion, which he qualified as bearing discussion.

The specimens now before the Society was the best proof of the error then committed; they were encephaloid cancer in the most exquisite form. The patient had made a comparatively good recovery from amputation. Slough having occurred in the wound, the latter had closed by granulation. In July he rose from his bed and walked freely about with the aid of crutches. In the beginning of August the stump was in so satisfactory a condition as to render the order of an artificial leg practicable. Soon after, the patient went into the country for the purpose of recuperating his shattered constitution. Thither Dr. Bauer had accompanied him. In the latter part of August, two small nodules were simultaneously noticed, one in the stump, the other at the cartilage of the ninth left rib. Whon first seen they were scarcely larger than a pea, and firm.

Their growth was so rapid that they had attained the size of a walnut before a week had elapsed. The disease increased from that time, invaded the inguinal glands of the affected side, and soon made its appearance in the organs of the chest. The dyspnœa was great, yet the respiratory murmur was almost clear, and the resonance not very greatly dulled. With a rapid pulse and increasing respiratory difficulties, the patient gradually sunk, and expired in the middle of the present month. Within seven weeks, the cancerous process apparently recommenced. The morbid material was unusually soft, and seemed to have entirely broken up in fat granules, scarcely leaving a trace of its characteristic cellular structure.

Thus far, the case seemed not to present any peculiar features. It may be said that the primitive cancer, returned after amputation, and as is the usual way, it returned in a softer form. Yet in this easy way the case could not be disposed of, nor the discrepancy of the previous diagnosis solved, or the course of the disease reconciled with established notions.

Heretofore the opinion had prevailed that cancer was a disease sui generis; that it was distinguished by the peculiarity of its developments, structure, growth, and termination; that benign tumors could neither grow upon a cancerous subject, nor be turned into malignant ones, etc. Dr. Bauer made no pretensions as a microscopist, and certainly placed no positive reliance upon the results of his microscopic investigations. If he had succeeded in ascertaining the exact structure of the articular mass, it had been due to the perfection and multiformity of its cells. But the discrepancy in the diagnosis arose from the presence and structure of the consecutive tumors. Dr. Schnetter, a most proficient microscopist, pronounced them unequivocally to be sarcomata, and his opinion weighed heavily in forming the diagnosis. Certainly nothing presented itself in those tumors that came near to cancerous structure, and when their mode of growth and their apparent dependance on the articular tumor was considered, it was almost impossible to consider it cancer. Nevertheless, the cancer, and consequently the error of opinion were but too clearly demonstrated by the specimens. The question arose, therefore, whether the established notions of cancerous disease were at all correct, and did not require a careful revision.

The best microscopists and pathologists deny at the present day the existence of a cancer cell. Virchow most emphatically assures us that he has never seen a cell formation in cancerous structure of peculiar attributes. Bilroth, who likewise has paid great attention to the minute structure of cancerous growths freely admits the impossibility of classifying tumors from their microscopic appearance, and therefore has returned to the clinical distinction in which the microscope occupies but a small space. He alludes to instances in which the same strncture may be benign in one case and malignant in another. And again, Virchow demonstrates that simple connective tissue with its natural cellular bodies, may become the focus of any structural metamorphosis, and sees no reason why one should not change into the other. According to him, cancer is by no means a characteristic, a strictly defined, and under all circumstances the same process. What in one place of the body and at one time may be perfectly healthy structure is cancer at another place and at another time; nay, even the hyperplasy of cells does not apply to all forms of eancer, as, for instance, in scirrhus, the most pertinacious of all, the proliferation of cells is very scanty.

These remarks though fragmentary, Dr. Bauer thought of sufficient strength to engage our attention, and to indicate that the chapter on cancer was by no means as yet completed.

EDITORIAL DEPARTMENT.

PERISCOPE.

Weekly Summary of American Medical Journalism.

By O. C. Gibbs, M.D.
Of Frewsburg, N.Y.

DIPHTHERIA.

In the *Chicago Medical Journal*, for July, Dr. J. J. Morgan, of Windham, Iowa, has an article upon diphtheria, in which some opinions are expressed not in accordance with those usually held; and yet, in regard to those now referred to, we believe them to be correct. He says he has treated over two hundred cases, and "the first and main thing that I wish to notice here is, that death did not occur, in any single instance, where the false membrane was confined to the fauces, where the exudation did not extend to the larynges proper. But in all the fatal cases that came under my observation, the laryngeal symptoms predominated. The inquiry that suggests itself is: why does not death occur in those cases where the exudation is extensively developed, but confined to the fauces? Granting the supposition, which is probably a true one, that the disease depends upon some blood-poison; we are led to inquire, do the fatal results arise from the original vitiated condition of the blood, depressing the nervous centres as in malignant typhus? or are the aggravated symptoms and alarming fatality, due to a materies morbi, the result of an imperfect æration of the blood, consequent upon the obstruction offered to respiration by the local affection? I am led to favor the latter view of the case, based upon the experience and observation of over two hundred cases. And what I wish to maintain is, that patients die from the effects of local disease, and not from the virulence of a poison with which the blood is contaminated."

Our opinion coincides with that of Dr. Morgan. We always judge of the danger of a case by the severity, locality, and peculiarities of the local symptoms. And more, we have seen cases die with strength but little impaired, which we should scarcely expect would be the case if they died from constitutional disease alone. Further explaining his views, the Doctor adds: "The view I take of it is this: that where the constitutional symptoms are of an aggravated character, the more formidable will be the local disease, the more rapid will be its descent to the air-passages; thus seriously compromising the life of the patient. This is the experience that has fallen to my lot." We have seen cases where the pulse was but little affected, and the patients would not take the bed, and yet the tonsils would go on to gangrene and sloughing within twenty-four or thirty-six hours!

Bearing upon this pathological view, he says: "All that I wish to contend for in this connection is, that the constitutional treatment is secondary in importance to the local applications; for I believe the majority of severe cases would succumb to the local obstruction, ere the systemic remedies, were they ever so potent, could alter the crasis of the blood, neutralize its poisonous properties, and send a healthy flow of the life current to stimulate anew the depressed nervous system. That local applications do affectually arrest the disease, when used before the air-passages are too seriously implicated, I think a fair trial will abundantly prove."

He commences treatment with a mild cathartic, or an emetic, if the case is severe, and then, "either immediately preceding the giving of the emetic, or soon after its operation, I would apply to the throat, if the coating were very thick, lunar-caustic, in substance finely pulverized, touching only those parts which are covered with the exudation. If the coating is rather limited in extent, and not very heavy, a solution varying from fifteen to thirty grains to the ounce may be used. The applications will rarely need to be made more than twice each day, and continued until the false membrane ceases to be formed."

His general treatment is chlorate of potash, in from three to ten grain doses, every three or four hours, and from one to four grains of quinine, at mid interval of the other doses.

We have passed two epidemics, and have used a variety of local remedies, and must say that, though we commenced with the nitrate of silver, it never pleased us, and we often thought it was worse than nothing. We soon settled down upon a compound composed of a saturated solution of chloride of potash, with the addition of about one fourth of the muriate tincture of iron. This was to be applied with a rather large mop, made by fastening soft cotton-batting on a stick. We prefer this to a sponge or a brush—its simplicity and softness being its principal recommendation, and we required a new one for each application.

There is one condition where we have thought a few applications of nitrate of silver was of service, which condition we will briefly state. We have seen, in an epidemic that has been prevailing here for the last three months, cases unlike any that we have seen elsewhere alluded to. Some cases swell largely, both externally and internally, and the tonsils rapidly slough, in from one to four days from first visit, if that were made in from four to six hours from the first symptoms. When the tonsils sloughed, a deep excavation would be left that would often greatly increase by time—an

excavation that a good sized hickory-nut could easily be placed in. In one case this ulceration was very deep, and the patient finally died, quite unexpectedly, after he had been two weeks improving, in convulsions. We could not account for this sudden onset of fatal convulsions, except by supposing the disease had so extended as to affect the sensorial ganglia, or medulla oblongata. When the sloughing first takes place, we have made two or three applications of a strong solution of nitrate of silver, certainly with no perceptible injury, but later we preferred our usual applications of the chlorates of iron and potassa. Our general treatment has been uniformly as follows: chlorate of potash and the tr. chlorate of iron in a combined solution, but separate from that designed for local application, and weaker of iron—designing the patient, if an adult, to get about twenty drops in a table-spoonful. This to be repeated every four hours, and quinine in the interval, much in the doses recommended by Dr. Morgan. In the first three days, if there was much fever, Dover's powders, or morphine, was added to the quinine. We might add here that, to one of these ulcerative cases, in a patient under ten years, we go utterly without hope. We have another practical remark to make about these cases, but we are not quite through with nitrate of silver.

Dr. R. C. Houghton, of Richmond, Indiana, some of whose opinions we noticed a few weeks since, in a private letter to us, under date of September 21st, 1861, says, in regard to the nitrate of silver: "In all the cases which I have seen and treated, and they are now many, I have never used this remedy in any form, and I am glad to say that I have yet not lost a case of the disease, which has been under my own treatment and control.

More than this, I differ with all my colleagues in practice in this region upon this question,—they using the remedy, while I do not—while their success is not equal in the same number treated. I have, from the very first cases I ever saw, protested against the use of this remedy in the treatment, and have uniformly observed the application of it, rendered the patient worse." (As he has *never used* it, he has probably not *seen* much of its effects.) Dr. Houghton leaves us to infer that his opinions are novel upon this subject. We have read, we believe, all that has been said upon the treatment of diphtheria, found in the journals of this country, except such as have *seceded* since Uncle Sam has refused to bring them to us, and such matter from Europe as has come to us in the *Lancet, British and Foreign Medico-Chir. Review*, and *Ranking's Abstract*, and must say we find the profession about equally divided upon the subject—some thinking it the only valuable local remedy, and others condemning it as hurtful. In the *Maryland and Virginia Medical and Surgical Journal*, for May, 1860, Dr. J. Du Val condemns it in the strongest and most unqualified terms.

Quoting further from Dr. Houghton's letter, he says: "I have adopted a plan of treatment, which I have never seen published in the journals, and which I will give to you. It is both a local and internal remedy, and has a more happy effect, in my cases, than any remedy I have yet used, in soothing, and yet radically controlling the local manifestations of disease." . . . . . The following is the doctor's formula and directions.

℞.—Glycerini, f℥jss.
Pot. chloras, ℥j.
Tinc. ferri chloridi, f℥ij. M. ft. sol.

This is used three or four times a day as a local remedy, and may be given in doses of half a teaspoonful, or more, according to age of patient, every four or six hours, at the same time the patient is using tonics and stimulants, if demanded to sustain the failing energies of the patient." We believe this is perhaps as good treatment as can well be devised—certainly it is such, omitting the glycerine, as we have adopted after much reading, some thought, and bedside observation. We, however, give quinine in all cases of any severity, and nourishing stimulants, such as egg-nog, in such cases as we can get it taken. If we have not used the glycerine in the compound, we have added as much gum arabic as the solution would dissolve, that more of the local medicine might adhere to the surface, and be less momentary in its action.

When Dr. Houghton says that the *local*, or general use of a combination of the chlorates of potash and iron originated in his own practice, we think he is not correct. We have not the time to hunt up authorities, though we had not supposed the local application was original with us. Many have certainly advised a combination of the chlorates for internal administration; some with the addition of hydrochloric acid, others have added nitrous ether. Dr. A. S. Clark, in the *Ohio Medical and Surgical Journal*, for May, 1860, advised the local application of glycerine. We have several other recent papers before us upon this subject, but we must defer their analysis. We cannot afford to occupy all our available space with one subject however interesting. It might not be unprofitable to give, in one article, the various local and general remedies that have been recommended. Perhaps we may do that, when time is little more abundant for such labor, and our energies, enfeebled by recent illness, recuperate a little.

On looking back, we find there is one thought or suggestion in practice that we are anxious to present, and we solicit an early trial of it by those who *can* put in practice. In the country, we find an almost unyielding opposition to it; but, for ourselves, our faith in its propriety is very strong. Any operative procedure about the throat has been condemned by most autho-

rities. Of the severe cases here, we have had two classes—one in which the tonsils sloughed out, and the other in which they did not; in all other respects they seemed identical, except in those which did not slough, the false membrane was usually thicker and more wide spread than in the other cases. In both classes the uvula was greatly enlarged. In those cases in which sloughing did not occur, death was early threatened by suffocation. At first we began to tear off the thick false membrane, excise the uvula, and perhaps one tonsil. This was only done late, and to prevent immediate death. It, in every case, seemed to relieve urgent symptoms, and to prolong, but did not save life. We very early became convinced of the impropriety of removing the exudative membrane—a procedure earnestly advocated by most authorities. It seems to be a protection which nature has provided for the diseased surfaces, and cannot endanger life by its presence, except when it may be situated right at the epiglottis, and when there situated its removal is almost impossible. Reflecting upon all the circumstances, and rendered almost frantic with the discouragement of having lost our first three cases, we proposed to excise the uvula, and at least one tonsil *at the first visit.* This proposition met with great objection. However, we succeeded in carrying our point in nearly all the cases where we wished to so operate. We have never yet removed both tonsils. What is the result:—it was only until then that we began to save any of our severe cases, belonging to the two classes mentioned above. In the sloughing cases there was no sloughing on the cut side, while on the other a deep and ragged ulcer would soon appear. In both cases the side of the excision would be well in half the time required for the healing of the other side. Two rival practitioners, who did not succeed in getting a single case until we had treated more than twenty, condemned in unqualified terms, our operative treatment. They have since had two severe cases each, and all four have died! In the present epidemic, we have had about forty cases, out of which four have died—our first three, and tenth case. Our last case of death was in a very ignorant and filthy family, and consent to excision could not be had until too late to prevent deep sloughing. It is only in cases where the swelling is considerable, or there is a known tendency to ulceration, that we would recommend this procedure. We have, perhaps, operated in about one-third of our cases—the rest, excepting the first three, not requiring it.

Dr. Morgan says in diphtheria, "an entire suppression of the voice is rare." We have seen but one case. This was in a child of three years of age. The patient apparently made a good recovery, except this one symptom: was so as to be about the house and was discharged. It subsequently died suddenly. This was our second case.

A REMEDY FOR SEA-SICKNESS.

The surgeon of the steamship Great Britain, says, that after much experience in the treatment of sea-sickness, the remedy he has found most successful, is the nitro-hydrochloric acid, with sulphate of magnesia. He offers the following formula:

Dilute hydro-chloric acid,		℥ij.
" Nitric acid,		℥i.
Hydrocyanic acid,		gtt. xvi.
Water,	- -	℥viij. M.

Two tablespoonsfull to be taken every three or four hours.

SMALL-POX AND GLANDERS.

M. Guillou maintains that glanders in the in the horse is the analogue of small-pox in man. He proposes, in order to test the correctness of his opinion, to inoculate the pus of confluent small-pox upon the horse, and thinks that glanders may henceforth be prevented by the inoculation of the cow-pox lymph.

THE MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SATURDAY, NOVEMBER 2, 1861.

THE TREATMENT OF FRACTURES OF THE LONG BONES BY EXTENSION.

The characteristics of the recent improvements in surgical appliances have been in their simplification of form, and the reduction of their number. This remark could be illustrated by a reference to the works of any of the old authors, or, more conveniently, to the illustrated *Armamentarium Chirurgicum*, in which are displayed innumerable and complicated contrivances for performing the simplest surgical operations. Comparing these thousands of instruments with the limited paraphernalia of the surgical mechanician of the present time, or with the still fewer instruments in actual use by practicing surgeons, the present simplicity of appliances required by the high state of the science and art, contrasts curiously with their complexity in the rude condition of ancient surgery. Instruments are no longer contrived with the object of taking the place of the manual dexterity which should be required in operating.

It has been well said by a recent writer on fractures, that "it is not in the discovery and multiplication of mechanical expedients that the surgeon of this day declares his superiority,

so much as in the skillful and judicious employment of those already invented." In no department of surgery has the simplifying of the mechanical requirements been more advanced than in the treatment of fractures; and now it is asserted, and, we believe, proven, by one of the most practical and ingenious surgeons of this country, that the only correct and philosophic treatment of these injuries is almost absolutely *without apparatus.*

The articles by Dr. Swinburne, of Albany, on the treatment of fractures of the long bones, as published in this journal, or read before the Medical Society of the State of New York, have attracted the attention of surgeons to the subject, and induced a repetition of his method in numerous instances. Such a revolution as he therein proposes in the treatment of fractures, which would displace from use so many popular contrivances, and require, in surgeons, the abandonment of so many preconceived notions, could hardly be accomplished in a short period. But time, which proveth all things, has been allowed, and practical and unprejudiced men now adduce their testimony in favor of the logic of the reformer, and attest their experience in corroboration of the results obtained by him.

In the treatment of fractures of the long bone, Dr. Swinburne relies alone on *extension.* Splints are entirely discarded by him, excepting when they are indispensable as the medium by which the muscles are kept on the stretch, and where this tension can be kept up without a splint, the seat of fracture is left entirely bare. For any other purpose. he asserts that "splints are worse than useless, if not absolutely injurious," and that "the practical surgeon requires no appliances for the treatment of fractures of any of the long bones, except such as are extemporaneously made."

Dr. Swinburne claims that, by extension, *the muscles themselves are made to act as perfect splints;* and it has been experimentally shown that when muscles are made tense, they are not liable to much lateral deflection without actual rupture of their fibres. It has been also demonstrated that the muscles surrounding a fracture cannot be so stretched as to produce a separation of the fragments. Thus surrounded by tense muscles which cannot be overstretched, where, asks Dr. Swinburne, can the fractured ends go, but to a proper contact? This has been illustrated on the cadaver by Dr. Swinburne. He dissects out cleanly all the muscles surrounding any long bone, carefully preserving their attachments; the bone is then fractured and extension made, when the broken ends invariably assume a normal position. If such is the effect of extension in the dissected limb, the general investment of the bone in the living subject with skin, fat, fascia, and connective tissue, should give more lateral support, and make its condition for adjustment still more favorable. Dr. Swinburne therefore asserts that the muscles and other investments of the bone, are the only true splints.

Besides the inutility of splints, they are proved to be absolutely injurious. When a bone is broken, either a projecting point or an angle usually exists, which presses into the muscles, thus painfully goring and irritating them. If splints or bandages are applied, the pressure on the prominence is increased. The lateral pressure of splints and bandages also prevents or interferes with the proper formation of callus. The same pressure on the muscles often results in producing adhesions between them and to other surrounding tissues, thus impeding mobility, and making the restoration of the limb to usefulness tedious. Splints are also said, by Dr. Swinburne, to unnecessarily encumber the limb, and prevent its proper exposure to the eye of the surgeon.

The simplicity of this plan of treatment commends it particularly to practitioners in the country, and to all on emergencies. To the military surgeon, at this time, it will be well to bear in mind, that he will be able, by this method, to accurately and securely adjust on the field a painful fracture of the thigh if strong extension of the limb be made with but a fence-rail, a musket, or from fixed points on the floor of an ambulance, and that the apposition will be as correct as if effected by the most complicated and costly apparatus now in use.

Dr. Swinburne's own experience, during thirteen years, in his method of treatment, has been large, and, as he states, invariably suc-

cessful. The plan has now received many practical tests by surgeons throughout the country who have decided in its favor. In this city it has the approbation of Doctor Gross, Doctor Agnew, and others. In recommending this plan to practitioners, we would refer for its details to the articles on the subject, by its originator, which have appeared at different times in this journal, and to his pamphlet on the subject.

EDITORIAL NOTES AND COMMENTS.

Obstetrical Æsthetics.—Perhaps some of the younger portion of our readers may have had sufficient "*court* practice" to enable them to relish some delicate advice, which has been recently offered on the subject. If their midwifery experience has been suburban, and of a Celtic or Teutonic cast, the hints offered will, by contrast, be more impressive.

Dr. Bedford, of New York, in his new work on Obstetrics, gives the following directions for professional conduct toward parturient patients:

"You approach her gently and courteously, and enter into conversation with her, talking of any and everything, except of the subject directly connected with the object of your visit."

It may be difficult, indeed, for the practitioner, who has been roused from his repose at night, to attend an obstetrical case, to talk of anything else than the cause of the disturbance of his slumbers, and it may also be difficult to interest the patient in any other subject. However, "*any and everything*" is a wide range for conversational powers, and as it is deemed proper to talk only of matters very remote from the object of your visit, perhaps, as the occasion is often in the "very witching hours of night," something sentimental would be sufficiently remote, yet in accordance with the advice.

Having entertained the patient with "any and everything except the subject directly connected with your visit," the practitioner descends from the sublime to stern matters of fact, and proposes a vaginal examination, and is directed to deport himself in the following modest manner:

"While the nurse is arranging the patient, you will generally be requested, for the time being, to walk into an adjoining room; but if not, be careful that you occupy yourself with something else than gazing at the movements of the parties; take a seat, and turn your back: become thoughtful, as if lost in the solution of some great professional problem; or, if a book be at hand, open it, and improve your mind."

If the modest practitioner is unfortunately obliged to remain in the room, it might have been suggested that his white cambric may be conveniently used to conceal his blushes. Some ready "professional problem" for abstracted rumination at such a time might also have been proposed.

In connection with squeamish advice, we may mention the case of a practitioner in this city, who says that he is so sympathetic with his obstetric patients, that there is a remarkable sympathy between the patient's uterus and his own stomach, and that when the former contracts, his gastric organ does the same—synchronously with uterine expulsion, his stomach performs emesis.

Intra Capsular Fractures.—The able paper, on "Intra Capsular Fractures," read by Dr. George K. Smith, of New York, on Friday evening of last week, before the Surgical Section of the New York Academy of Medicine, will be published in successive numbers of the Reporter. It will form a valuable addition to surgical literature.

A discussion upon the subject takes place on the fourth Friday of November, which will also be reported for our columns.

Important Paper and Discussion.—At a stated meeting of the New York Academy of Medicine, Oct. 2, ult., Dr. Parigot read (by permission) a paper on "*Moral Insanity in Relation to Criminal Acts*," in the conclusion of which he submitted to the Academy the following propositions:

1st. That the disease, called *moral insanity*, is but an affection of the faculty of volition and instincts, attended by physiological symptoms.

2d. That the name of moral insanity is defective, because it bears no relation to the cause, symptoms, and results of that disease; and that it misleads the opinion of the bar concerning crimes committed under its influence.

3d. That the laws and rules concerning insanity relating to civil or criminal cases, ought to be put in accordance with the actual state of medical science.

4th. That no person ought to be considered as being of unsound mind, if physiological and mental signs cannot be traced and ascertained.

5th. That a reform concerning medical certi-

ficates is necessary to insure regularity in obtaining from courts or judges orders to detain a person as insane, and that no such document be admitted, unless containing, 1st, all the symptoms, whether amnestic, physical, physiological and mental, concerning the cases; 2d the diagnosis and prognosis of the observed disease.

A further discussion of the important subject of the paper is to take place on Wednesday evening of next week.

An Explanation.—In reply to the letter of Dr. J. W. Thompson, in the Reporter of Oct. 5, Dr. O. C. Gibbs writes us as follows:

I cannot quote in full what every writer says, however much he may desire it. So far as I do quote I quote correctly, and when I condense I endeavor never to misrepresent an author's views, and am not conscious of *ever having done so*. Now, I take it upon myself to say, that Dr. Thompson's charge is utterly groundless. The blunder is entirely with himself! If he will turn back to my article, he will find I quoted Dr. N. E. Jones, of Circleville, Ohio, as recommending belladonna in diphtheria. After concluding my notice of Dr. Jones' article, as somewhat pertinent to the subject, I quoted Dr. Thompson as having recommended the same remedy in *incipient sore throat*, and nothing more, and quoted the pith of his paper entire and correctly, in which what he did believe was distinctly stated! I said nothing of diphtheria in this connection. The most and all that can be made from the mention of these opinions in connection is this; if it is true, as Dr. Thompson states, that belladonna "is almost a specific" in incipient or simple sore throat, *then it may be true that*, as Dr. Jones alleges, it may have a favorable influence over sore throats in diphtheria.

Substitute for Tinctures.—Sir James Murray, in the *Dublin Medical Press*, after a long experience and investigation, proposes, as a substitute for the class of medicines known as tinctures, a liquid of highly carbonated magnesia and camphor. He finds that this combination by simple cold infusion, is quite capable of extracting the medicinal qualities of roots, leaves, seeds, and even gum resins, while the conservative and antiseptic properties of the camphor prevent decomposition, and sufficiently stimulate the stomach and absorbents, to secure the fullest expected effect. The tinctures, in common use are all made by a maceration of the active ingredient in proof spirit of wine. This method dissolves the active ingredients of the drug, but it is objectionable in that the potency of the spirit prevents the exhibition of the medicine in sufficient doses to effect the desired object, and requires dilution and repetition. The menstruum proposed by Sir James, obviates all these objections, and we see no reason why it shall not come into use.

Correspondence.

NEW YORK CORRESPONDENCE.

Interdum vulgus rectum videt; est ubi peccat.—*Horace.*

At a full meeting of the surgical section of the Academy of Medicine, last Friday evening, under the hospitable roof the urbane Prof. Wood, (James R.), Dr. George K. Smith read his ingenious and most interestingly instructive paper on intra-capsular fracture and its various relations to the capsule. I forbear going into the details of this lecture, which was listened to with marked attention and will be discussed at length the last Friday in November. Besides, I understand that, ere long, it will appear in the columns of your own paper. If the diagrams, sections, and perspective drawings of those dissections, made by Dr. Smith, be properly engraved, this most important addition to the surgical world will be duly appreciated abroad, and form a nucleus around the Journal that was fortunate enough to give it birth.

Up to the present time over one hundred and twenty students have entered the University Medical College for Instruction, which retains in vigor all its former lecturers, whose aim is lucidly to teach. There is, however, a new demonstrator. Dr. W. R. Donaghe, whose qualifications for imparting what he knows—and that not little—are only equalled by his desire to unfold the mysteries of the cadaver.

At Bellevue College all is doing well—some sixty students regularly attend—and the circulating opinion is, that success will meet halfway the efforts of those who projected the great scheme of the hospital and college. If called upon to give opinion, I should say the only thing I feared was, lest one professor crossed his brother's boundary line. That is, as two and three have the same subject, such as Obstetrics, Surgery and Anatomy; it is more than probable that land marks may be moved.

Dr. Mott being asked the other day, his opin-

ion of the state of affairs in this country, technically replied as follows:

"Sir, I grant you that the body politic has been severely lacerated, and I doubt not that the wound will heal eventually, but it will be by the second intention. There will always be a scar to mark the union of dissevered parts." Good for Dr. Mott!

Dr. Turner, of the Inebriate Asylum, at Binghamton, is silently and patiently active in the noble round of duty for his fellow creatures. The roof of this gigantic Institution is being covered in, and soon its walls will be prepared to welcome those who seek relief from firewater and its deadly consequences. Already have four thousand seven hundred and twenty-eight applicants made formal solicitations for admittance. Further comment is not necessary. Such a testimony is sufficiently forcible to demonstrate the vast utility of such an enterprise.

From what I know of the architectural proportions of this building, I do not hesitate to assert that, when finished, it will surpass any public edifice, for the alleviation of suffering, now in existence. Thought seems to have luxuriated in the fields of original conception. Harmony pervades its outline, symmetry, and vast dimensions. Hygiene will for ever dwell beneath its genial roof, and Dr. Turner's name become a synonym for patient industry, honest zeal, untiring energy, devotional charity, ubiquitous exertions, ceaseless labors, and a dictionary of unmentionable praises.

GOURMET.

A CASE OF PROLONGED RETENTION OF THE FŒTUS.

Bloomfield, N. J., Oct., 1861.

Messrs. Editors:—I send you the following case, which, if you deem of sufficient importance, you are at liberty to publish:

Mrs. L. B., became pregnant for the third time about the 1st September, 1860, having aborted once at about the third month, and once been confined at the full time, nearly three years previously. Gestation progressed naturally, the mother's form gradually enlarged, and the movements of the fœtus were strong and lively until the last of February, near the close of the sixth month, when, by some exposure, she took a severe cold, which was accompanied with considerable cough, and as she stated "it seemed to come from her very bowels." On Sunday night, the 3d March, immediately on retiring to bed, she was seized with a violent chill, which lasted nearly an hour, and she said "it seemed as though the child twisted itself up in a knot," and its movements were quite painful. From this time all motion ceased, and her form gradually diminished until about the eighth month. The womb could be felt just above the pubis, about as large as a good sized orange. As she felt considerable anxiety in relation to herself, I told her that probably labor would occur at the ninth month if not before, but that it was not advisable to do anything at present, especially as her health seemed usually good. But the ninth month passed and the tenth also, and as there were no indications of labor, through her request, I went with her to consult Prof. C. R. Gilman, of New York, who, after an examination, advised her, as I had previously done, to borrow no trouble about herself, to do nothing, but just console herself with the pleasing idea that she had probably done all she would towards peopling the country. That it would, probably, remain with her as it was, a hard, inert and inoffensive mass, that she would carry with her to the grave, though, of course, it might possibly yet come away. Thus it continued until the evening of the 8th October, about thirteen months from conception, and seven from the death of the fœtus, when she was taken with a chill, some slight pains, and a little show. The pains continued slightly during the night, and the os dilated a little. During the forenoon the pains increased in force and frequency, and the os dilated gradually, though slowly, and at about 2 P. M. she was delivered of the fœtus; and the placenta was easily removed. During the labor, except the first mere stain of blood, there was no hemorrhage. The waters had been entirely absorbed, and the flesh seemed devoid of all moisture. No decomposition had taken place either of child or placenta. A slight hemorrhage followed its expulsion. No trace of membrane could be detected. Convalescence was natural and rapid. Lochia continued about a week. There was no secretion of milk.

N. S. KING, M. D.

Lancaster, Ohio, October 1861.

GENTLEMEN:—May I avail myself of the opportunity afforded to me through the medium of your columns, to publish a case which I think will be interesting to your readers.

Some years ago I was invited to Cincinnati by a medical friend of mine to see, what he called, an unusual case. He asserted he had not witnessed a similar case in the course of twenty years' practice. Arriving at the bedside we found a young lady about eighteen years of

age. At first view, she was in apparently good health, though laughing immoderately, with tears trickling down her cheeks, very profusely. I was informed that should I remain for two hours, I would find her next paroxysm would be a fit of crying, which would continue at least two hours, not consolable by any human effort. Her pulse, during the fit of laughing, was as low as forty, marked by strong intermission. The extremities were remarkably cold; a semicircle, of lead colored appearance, surrounded the under eyelids. At the expiration of the two hours, the paroxysm of crying came on. The heart and arteries were unusually excited. Her skin became dry and husky; a general heat pervaded her whole system; she seemed unconscious, her eyes glaring, and her tongue seemed partially paralyzed, A hectic flush displayed itself on the left cheek, which increased gradually to the size of a twenty-five cent piece. She made use of some unintelligible expressions, which were interpreted by the parents; she asked for water. The sobbing, sighing, and moaning continued during the next two hours I was present. At the conclusion of that period she opened her eyes and gazed furiously about, calling for her mother, inquiring where she was.

Shortly after, an instantaneous contraction of the muscular fibres took place. First, in the lower extremities, then gradually proceeding upward. After this, a cold, clammy perspiration issued, yielding a fetid odor; then she fell into a profound sleep, which I was informed would continue one hour. I determined to remain until I could witness all her symptoms. She has singing in her ears, vertigo when stooping, and a loss of memory. Occurrences, which had taken place years before, were more easily remembered by her, than those which had occurred but recently. On account of the unusual action of the heart and arteries, we gave the following prescription:

℞. Tinct. digitalis, two drachms.
Galbanum, spts. of nitre, each, one drachm.
Simple syrup, two oz.

A dessert spoonful to be taken every hour until the pulse shall be reduced to its natural standard. The third dose had the desired effect. We next commenced with the following:

℞. Fowler's solution of Arsenic, Hoffman's Anodyne liquor—of each one drachm.
Simple syrup, two ounces.

A teaspoonful three times a day. I saw her one month after in perfect health. She described to me the following symptoms, which she felt previous to her tedious and distressinh disease, which continued three months, with an intermission of six days between each paroxysm.

A numbness of her left hand fingers, moving up the arm towards the clavicle; next flashes of heat and cold along her spinal vertebra; then objects appeared in motion and very green to her vision. Shortly after vomiting, then a spasmodic affection of the stomach and midriff, (as she called it a double hiccough.) She immediately after became unconscious.

Edward Lynch, M. D.

Lancaster, Ohio.

NEWS AND MISCELLANY.

Appointment of Surgeons by the Governor of Pennsylvania.—The following appointments were officially announced at the Executive Department on Saturday morning:

Surgeons.—Wm. H. Taggart, Philadelphia; George S. Kemble, Harrisburg; Wm. J. Fleming, Philadelphia; Wm. Allen Peck, Montgomery; O. M. Robbins, Northumberland; Franklin Irish, Alleghany; John J. Marks, Mifflin; J. P. Wilson, Centre; D. Webster Bland, Schuylkill; Wm. H. Worthington, Chester; J. B. Laidly, Greene; Jonas W. Lyman, Clinton; F. S. Jaquette, Philadelphia; J. M. Allen, Delaware; E. Griswold, Mercer; Isaac D. Knight, Philadelphia; G. L. Potter, Bellefonte; J. L. Stewart, Erie; E. R. Scholl, Reading; Wm. H. Gominger, Philadelphia; J. R. Hays, Chester county; Wm. F. McCurdy, Philadelphia; Jas. L. Dunn, Crawford; J. N. Everhart, Chester; C. S. Widdifield, Montgomery; J. P. Hosack, Mercer; Wm. R. Blakeslee, Chester; Robert Barr, Indiana; A. W. Wright, Chester; R. S. Simington, Montour; David Merritt, Philadelphia; G. F. Hoop, Centre; Wm. H. Gunkle, Chester; John Mc Grath, Philadelphia; John G. Frow, Perry; Wm. R. Stavely, Bucks; Geo. B. Fundenberg, Somerset; A. P. Frick, Lancaster.

Assistant Surgeons.—William F. Robinson, Montgomery; J. P. McClearly, Northumberland; James McFadden, Philadelphia; Washington G. Nugent, Bucks; J. W. Anawalt, Westmoreland; Thomas B. Potter, Centre; Theodore Jacobs, Montgomery; William Morrow Knox, Berks; C. J. Siemans, Northampton; A. Owen Stillé, Philadelphia; A. W. Fischer, Northumberland; George W. Miller, Philadelphia; Theodore S. Christ, Lewisburg; Lewis C. Cummings, Philadelphia; W. Murray Wiedman, Lebanon; J. G. McCandless, Alleghany; A. W. Pittinos, Philadelphia; J. Bird Peale, Philadelphia; Charles W. Houghton, Philadelphia; John C. Levis, Beaver; A. W. Mathues, Delaware; J. S. Marbourg, Cambria; D. F. McKinney, Lycoming; George B. Lummis, Philadelphia; J. Stites Whildin, Erie;

Wm. H. Davis, Tioga; Robert B. Cruice, Philadelphia; George T. Weeseman, Dauphin; Thomas F. Duncan, Philadelphia; J. M. Junkin, Chester county; Philip Leidy, Philadelphia; J. H. Wintrode, Huntingdon; P. Wager Montgomery; Wm. Church, Crawford; Robert A. Christian, Philadelphia: J. F. Hutchison, Centre.

Dr. F. H. Gross, of Pittsburg, has been duly examined by the Board of Army Surgeons at Washington, and has been appointed by the President to the position of Brigade-Surgeon.

Warming and Drying the Air and Earth Floors of Tents.—A writer from one of the camps gives the following description of a simple and effective method which has been resorted to for the purpose of warming tents and drying the ground in and around them: A hole is dug in the centre of the tent, two feet in depth and diameter. This is walled with stones laid in soft clay, and covered at the top, with the exception of a small aperture for the introduction of fuel. For this aperture there must be a close-fitting door or cover, which can be opened and closed at pleasure. Across one side of the tent a trench is laid and covered with wood and earth through which the cold air is conveyed freely to the bottom part of this subterranean fire place. From the top of the same and across the opposite side of the tent, another trench is laid and carefully covered with stone and earth, through which the smoke and surplus heat is carried off. This is the whole machine. The merits of it are obvious. It is universally practicable. It can be introduced easily into any tent or dwelling. The economy of it costs only a few hours' work for three or four men. The convenience of it being entirely under ground it takes up none of the precious room of our small tents. The utility of it: it dries and warms the earth within, and even beyond the entire circuit of the tent, and thus prevents those damp, cold and unhealthy exhalations from the earth which are probably the chief cause of the ill health among soldiers. The tents are thus also furnished with a moist and genial atmosphere, the heat of which can be easily increased so as to meet the exigencies of the coldest part of the season. To realize the importance of this you must remember that the walls of our houses are only thin canvas—that they are so readily penetrated by cold, or heat or moisture, that the atmosphere within follows rapidly the changes in the condition of the atmosphere without. Indeed, so far as this is concerned, there is but very little difference between living under the tents and in the open air.

Ambulances.—There are now at, or in the vicinity of Washington, one hundred and thirty-three ambulances.

Cholera is prevailing extensively in India, and is making terrible ravages among the British troops.

Surgeon G. W. Hunt, furnishes the following report of diseases in the 10th Regiment, N. Y. Volunteers, at Fortress Monroe. Total strength 2120; number treated, 1312; no deaths. Among the diseases were, intermittent fever, 10; remittent, 23; diarrhœa, 552; bronchitis, 76; Rheumatism, 68; incised wounds, 37; ophthalmia, 13; otitis, 17; debility, 24; hemorrhage, 11.

Death from Umbilical Hæmorrhage.—This case is curious from the circumstances hereinafter mentioned. M. Homolle brought it forward at the meeting of the Paris Medico-Practical Society. The child was the issue of a marriage between *uncle and niece*. The latter was confined three times at the full period during the first thirty-two months of her marriage. She nursed all her children, and each time fell into the family way whilst nursing. The first child had, during the early months of his life, slight strabismus, and was somewhat backward as to his power of speaking. The second child went on well until it was four months old, when weakness of the legs was observed, which finally became confirmed paralysis. The child died at ten months of imperfectly marked whooping cough. The third child, the one who died of umbilical hæmorrhage, was born quite healthy, save a few convulsive movements, which were hardly noticed. On the eighth day ecchymotic stains were noticed under the child's nails, with a slight exudation of blood. One of the fingers even presented a kind of bloody pouch. The next day, from the umbilical cicatrix oozed a little blood; as this persisted, pledgets moistened with a solution of perchloride of iron at 33° were applied. The oozing continued the next day, in spite of careful plugging with the perchloride and well-applied bandages; and the child died of anæmia on the tenth day after its birth, the oozing have never ceased.

Georgetown (D. C.) *Medical College.*—The regular course of lectures commenced in this institution last week. Notwithstanding the unpromising condition of the times for all institutions of learning, the full corps of lecturers announced, indicates no lack of energy or encouragement in this department. In addition to the Professors so long and favorably known to the public, two new ones appear, Dr. S. L. Loomis in the chair of Chemistry, and Dr. Montgomery St. John in that of Anatomy.

The Queen of Madagascar died recently of cancer, which had reappeared after an operation three months previously.

Mr. Symes' New Book, Observations in Clinical Surgery, has just been published in Edinburgh.

The cattle disease is prevailing to a great extent in Russia. It is there called the Siberian epidemic. In four districts near St. Petersburg, as many as 4.400 horses, 800 cows, and 319 sheep, have died within the past two months.

Owing to the appointment of Dr. Jacobs, as Assistant Surgeon in the Army, the Howard Hospital will require a resident physician in his place. This will be found a good school for the young practitioner.

Vaccine Matter for the Army.—We reiterate the request for vaccine matter for use in the army. All medical men can understand how disastrous would be an epidemic of small pox in the camps, and the propriety of vaccinating all the soldiers. Vaccine matter is still needed, and should be directed to Surgeon General Smith, No. 1112 Walnut street, Philadelphia.

The Board of Health, of this city, was applied to for aid in obtaining virus, and, considering the fact that there are a number of prominent medical men in that body, it is remarkable that the request should have met with opposition.

Green Color without Poison.—Much has been recently said in relation to poisoning from wall paper and other materials in ordinary use when colored green by arsenical salts. The *Scientific American* says, that a green color not inferior to that made from poisonous arsenic is produced by melting 59 parts of tin with 100 parts of nitrate of soda in a crucible, and then dissolving it when cold in a solution of caustic alkali. The clear portion of this solution is then diluted with water, and a cold solution of sulphate of copper is added. A reddish-yellow precipitate now results, which, on being washed and dried, becomes a beautiful green.

"Slink Veal."—In a new work on the Cow by Mr. Gamgee, speaking of the loss in slaughtering, the author says: "By pregnant cows the loss is very great. 300,000 out of 800,000 are slaughtered in this condition in France; and Charlier estimates the loss of forty-eight thousand pound sterling simply by the calf and its envelopes. It is disgusting to reflect that from the imperfect inspection of our slaughter houses calves that are found in cows are sold for human consumption. It is termed "slink veal."

Communications Received

Communications Received crowded out of the present number to make room for pressing matter

VITAL STATISTICS.

Of Philadelphia, for the week ending Oct. 26, 1861:

Deaths—Males, 127; females, 98; boys, 68; girls, 40—Total, 225. Adults, 108; children, 117. Under two years of age, 68. Natives, 162; Foreign, 40. People of color, 10.

Among the causes of death we notice—Apoplexy, 6; convulsions, 5; croup, 4; cholera infantum, 1; cholera morbus, 0; consumption, 40; diphtheria, 5; diarrhœa and dysentery, 6; dropsy of head, 6; debility, 19; scarlet fever, 9; typhus and typhoid fever, 9; inflammation of brain, 6; of bowels, 3; of lungs, 9; bronchitis, 0; congestion of brain, 3; of lungs, 2; erysipelas, 0; whooping cough, 0; marasmus, 15; small pox, 2.

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Of New York, for the week ending Oct. 21, 1861:

Deaths—Males, 203; females, 183; boys, 120; girls, 108. Total, 386. Under two years, 109. Natives, 281; Foreign, 105.

Among the causes of death we notice—Apoplexy, 4; infantile convulsions, 29; croup, 5; diphtheria, 8; scarlet fever, 16; typhus and typhoid fevers, 3; cholera infantum, 22; cholera morbus, 0; consumption, 52; small pox, 8; dropsy of head, 21; infantile marasmus, 39; diarrhœa and dysentery, 17; inflammation of brain, 17; of bowels, 10; of lungs, 17; bronchitis, 1; congestion of brain, 7; of lungs, 4; erysipelas, 0; whooping cough, 1; measles, 4. 183 deaths occurred from acute disease, and 38 from violent causes.

Medical Directory.

Under this head we propose to give such information in regard to the Medical Colleges, Hospitals, and Societies of the City as we may be able.

Pennsylvania Hospital, Eighth, below Spruce. Entrance on Eighth street.

Medical Clinic on Wednesday's and Saturday's, at 10 A. M., by Dr. J. F. Meigs.

Surgical do., at 11 A. M., by Dr. Geo. W. Norris.

Jefferson Medical College, Tenth, above Walnut.

Medical Clinic on Wednesdays and Saturdays, at 12 M., by Dr. R. Dunglison.

Surgical do., at 1 P. M., by Dr. S. D. Gross.

University of Pennsylvania, Ninth, below Market.

Surgical Clinic on Wednesday's and Saturday's, at 1 P. M., by Prof. Smith.

Dispensary Service every afternoon at 3 P. M., by Drs. Dunton and Hodge.

Pennsylvania College of Dental Surgery.—Clinical Lectures daily, (except Sunday,) from 2 to 4 P. M., by Dr. Goodwillie.

Wills Hospital for the Eye and Limb.—Clinics, Monday and Friday at 12 M., by T. G. Morton, M.D.

Howard Hospital, Lombard street, between Fifteenth and Sixteenth.

Clinical Lectures daily, at 12 M., 1 and 5 P. M. Monday and Thursday—Dr. Turnbull, at 1 P. M. Tuesday and Friday—Dr. Darrach, at 12 M.; Dr. Klapp, at 5 P. M. Wednesday and Saturday—Dr. Neff, at 12; Dr. Judson, at 1, and Dr. Morehouse, at 5 P. M. Thursday—Dr. Meigs, at 5 P. M. Wednesday and Friday—Dr. Atkinson, at half-past 3 P. M.

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